

THE "TENDRILS" OF THE KENTUCKY COFFEE-TREE

BY BYRON D. HALSTED

Seeing the paper by Dr. MacDougal upon tendrils of *Entada scandens* leads me to bring to light the following note made some years ago.

Much to my surprise in examining some young leaves of the *Gymnocladus dioica* (L.), "tendrils" were found present in each case. The leaves of this leguminous plant are pinnately decom-
pound, the sets of leaflets being in pairs although not usually opposite upon the common petiole. Between and above the uppermost pair there is a slender projection turned more or less to one side and an inch or so in length. There are similar appendages at the ends of the lateral pinnae.

In position and structure these appendages are tendril-like and as the *Gymnocladus* is a member of a family in which tendrils are not exceptional their presence here is not so surprising as might seem at first thought.

There is no apparent advantage in this structure to the plants now producing them and it becomes of only phylogenetic importance. It would seem, therefore, that at some time the ancestors of the *Gymnocladus* were truly tendril-bearing and it is to be inferred that they used them for clinging to supports. In becoming trees the members of this species lost the need of the tendril and the structure has become reduced to an abortive thread that seems useless and is evanescent. When a leaf has attained only a fraction of its full growth the vestige of the organ for clinging has disappeared.

It seems absurd that a stately tree should have at any time anything that suggests clinging to an object of support; but viewed in the light of a vanishing appendage it is highly interesting and instructive.

The same thing is true of the Honey Locust (*Gleditsia triacanthos* L.) and perhaps also of other trees of the Leguminosae.

The picture herewith sent is a sun print of portions of young leaves in which the "tendrils" may be seen.

Doctor MacDougal suggests that these proiongations of the leaf-axes may possibly be considered as degenerate terminal leaf-



lets. It is not easy to decide what they are historically or that they are not useful now to the plants that bear them.

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A NEW TIMBER FOR RAILROAD TIES

By H. H. RUSBY

It is reported that the Pennsylvania Railroad Company has arranged for a great innovation, in the use of tropical timbers for